

# **An Optical Chassis of Plating Film Reflection and Its Manufacturing Procedure**

## **Abstract**

An optical chassis of plating film layer reflection and its manufacturing  
5 procedure, the optical chassis includes: a shell body, a light source, plural  
reflection elements, a lens set, and an imaging apparatus. The reflection  
elements made of glass material in the prior art are changed to a layer or  
multi-layer of plating films of reflection material which are directly coated  
on the inside walls of the shell body of an optical chassis and used as the  
10 reflection elements thereof. Also, the shell body is designed as a structure  
for easy off-die and assembly. Not only the present invention completely  
gets rid of the prior positioning devices for glass mirrors, such as spring  
pieces, screws, and the like, but also it decreases the number of parts, saves  
assembly time and lowers the production cost. And, further it is without  
15 lowering the quality of image scanning, which is resulted from no loose or  
no movement of the reflection elements.